

## SEMINOLE COUNTY GOVERNMENT AGENDA MEMORANDUM

**SUBJECT:** Adoption of a Standard Prototype Structure for Construction of a Pedestrian Overpass Over Red Bug Lake Road at Red Bug Elementary School

**DEPARTMENT:** Public Works

**DIVISION:** Engineering

**AUTHORIZED BY:** Gary Johnson

**CONTACT:** Antoine Khoury

**EXT:** 5768

**MOTION/RECOMMENDATION:**

Continued from 01-27-2009 BCC meeting.

Adopt the recommended prototype structure for construction of a Pedestrian Overpass over Red Bug Lake Road at Red Bug Lake Elementary School.

District 1 Bob Dallari

Jerry McCollum

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**BACKGROUND:**

At the November 13, 2007, Board of County Commissioners (BCC) Meeting, the staff was directed to develop a pedestrian overpass prototype structure for the remaining two (2) budgeted pedestrian overpasses (Red Bug Lake Road at Red Bug Lake Elementary School, Capital Improvement Project Number 00196901; and Red Bug Lake Road at State Road 426, Capital Improvement Number 00229204), and also for any future pedestrian overpasses. Several concepts were analyzed with emphasis on function and minimizing maintenance requirements. Based on these criteria, staff is recommending the structure shown on Attachment 1 be adopted as the prototype for pedestrian overpasses. To access the pedestrian structure, either a Straight Ramp (Attachment 2) or a Switchback Ramp (Attachment 3) would be utilized with available right-of-way determining the type of access.

It should be noted concrete or steel would be used to construct the prototype pedestrian overpass. Concrete would be used for the structure unless the length of the span would require steel to be utilized. Whether steel or concrete is used, the overpass would look basically the same. The difference in estimated costs for the structures is shown on Attachment 4.

At the BCC meeting on January 27, 2009, the Board directed staff to meet with representatives from the City of Oviedo regarding the design and specifications for the pedestrian overpass over Red Bug Lake Road at State Road 426. At the BCC meeting on February 24, 2009, staff briefed the Board on the status of discussions with City of Oviedo representatives and received authorization to bring the prototype structure for construction of the pedestrian overpass over Red Bug Lake Road at Red Bug Lake Elementary School to the Board at their next scheduled meeting on March 10, 2009.

**STAFF RECOMMENDATION:**

Staff recommends the Board adopt the recommended prototype structure for construction of a Pedestrian Overpass over Red Bug Lake Road at Red Bug Lake Elementary School.

**ATTACHMENTS:**

1. Location Map
2. Attachment 1 - Recommended Prototype Bridge
3. Attachment 2 - Straight Ramp Concept
4. Attachment 3 - Switchback Ramp Concept
5. Attachment 4 - Cost Table

**Additionally Reviewed By:**

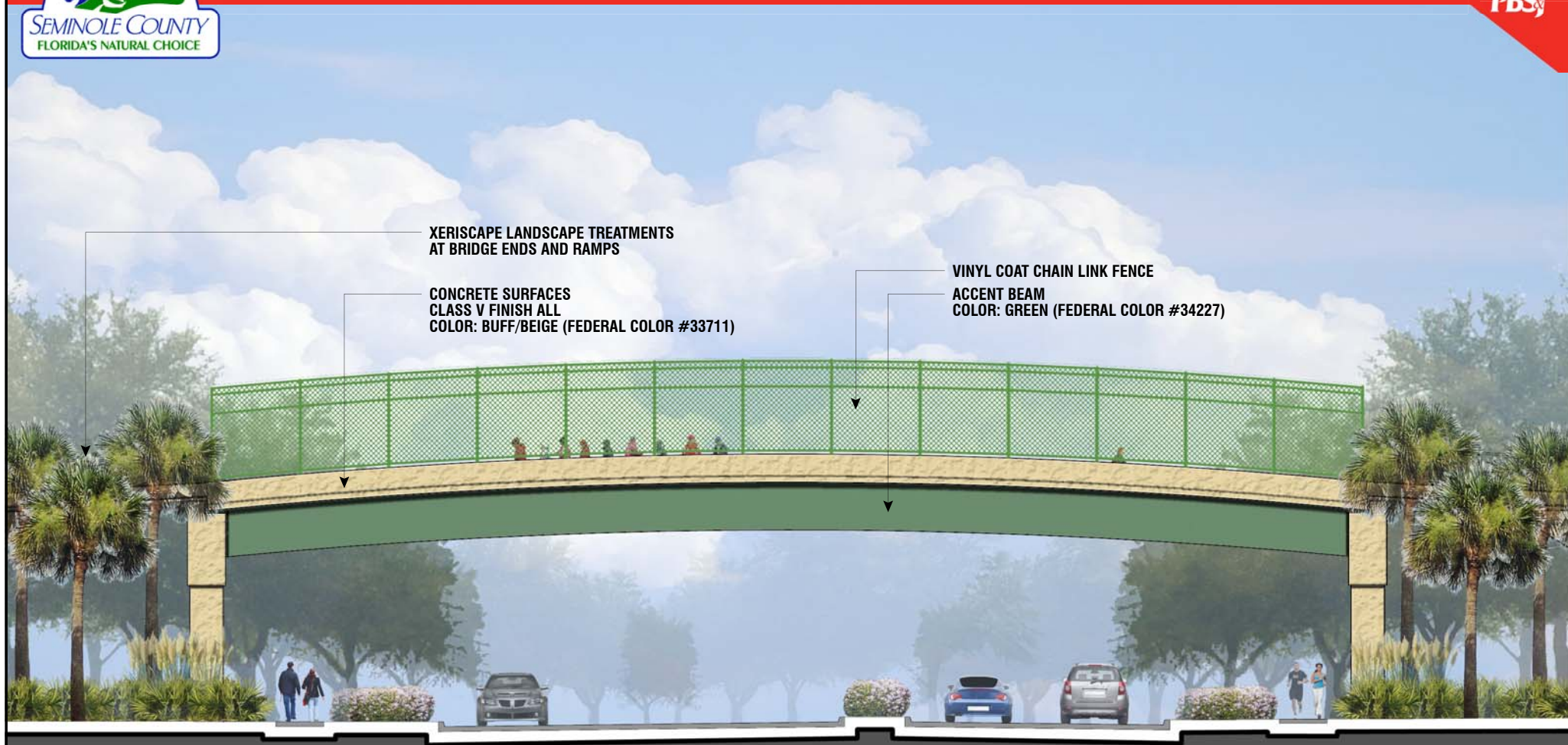
☐ County Attorney Review

☒ Budget Review ( Fredrik Coulter, Lisa Spriggs )

Red Bug Lake Road  
Elementary School  
Pedestrian Overpass  
Location Map



# RECOMMENDED PROTOTYPE BRIDGE

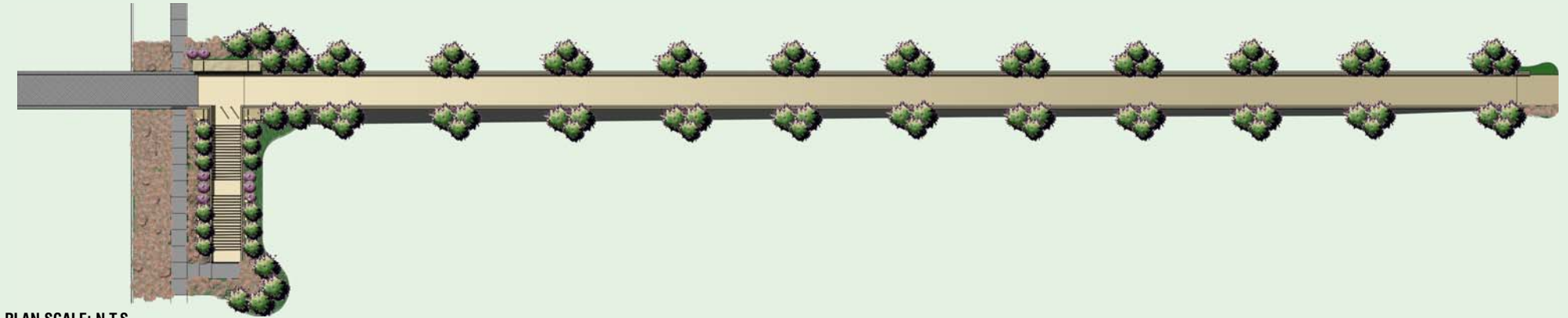


**PEDESTRIAN OVERPASS CONCEPT**  
SEMINOLE COUNTY, FLORIDA

**ATTACHMENT 1**



# STRAIGHT RAMP CONCEPT



PLAN SCALE: N.T.S



ELEVATION SCALE: N.T.S.

## PEDESTRIAN OVERPASS CONCEPT SEMINOLE COUNTY, FLORIDA

ATTACHMENT 2

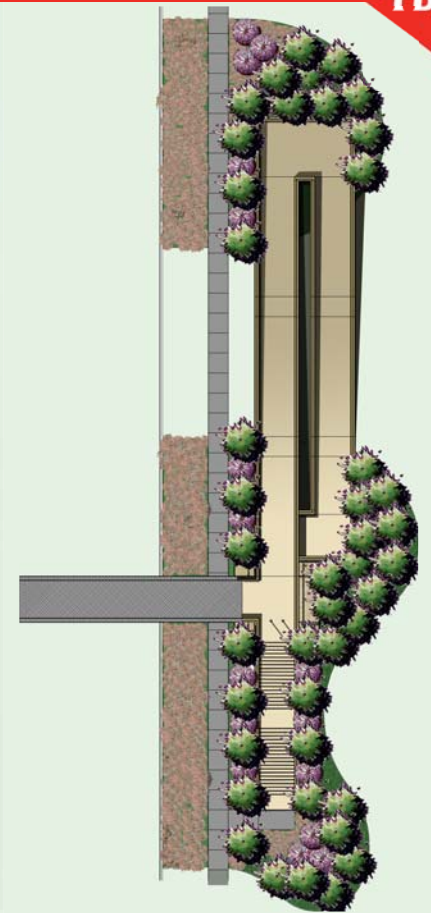


# SWITCHBACK RAMP CONCEPT

PBSJ®



ELEVATION SCALE: N.T.S.



PLAN SCALE: N.T.S.

## PEDESTRIAN OVERPASS CONCEPT SEMINOLE COUNTY, FLORIDA

ATTACHMENT 3

## COST TABLE

### ESTIMATED COST MATRIX

PEDESTRIAN OVERPASS ALTERNATIVES	RED BUG LAKE ELEMENTARY PEDESTRIAN OVERPASS	RED BUG LAKE ROAD AT SR 426 TRAIL OVERPASS
Concrete Beam Bridge	\$2.7 million	\$4.0 million
Steel Beam Bridge	\$3.0 million	\$4.4 million

**PEDESTRIAN OVERPASS CONCEPT**  
SEMINOLE COUNTY, FLORIDA

**ATTACHMENT 4**